Omadacycline is a broad-spectrum aminomethylcycline bacterial protein synthesis inhibitor that has been evaluated for the treatment of acute bacterial skin and skin structure infections (ABSSSI) 

Omadacycline demonstrated good activity against gram-positive and gram-negative bacteria, including methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant Enterococcus faecium (VRE) (Table 1).

Susceptibility testing was performed according to Clinical and Laboratory Standards Institute (CLSI) guidelines. The minimal inhibitory concentration (MIC) was determined by the broth microdilution method using a 96-well microtiter plate. The MICs were interpreted based on CLSI breakpoints for S. aureus and S. pneumoniae. The MICs were also determined using the ETest method (BioMérieux, Inc., France) for S. pyogenes, S. aureus, and E. coli

Overall susceptibilities for tetracycline (MIC50/90 values) were compared against Enterobacteriaceae, including Enterobacter cloacae, Klebsiella pneumoniae, and Enterococcus faecalis.

Results of this surveillance study support the continued use and development of omadacycline for the treatment of community-acquired infections, including S. aureus and other key pathogens.

Table 1: Intrinsically active omadacycline and comparators against SSSI, RTI, and UTI pathogens collected from medical centers in the United States and Europe during 2018

Table 2: Antimicrobial activity of omadacycline and comparators against bacterial isolates collected from different infection types in the United States and European medical centers during 2018

CONCLUSIONS

Omadacycline demonstrated patient activity against the gram-positive and gram-negative bacteria collected from patients with multiple infection types in the United States and Europe, including S. aureus and other key pathogens.

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REFERENCES


White, WA, USA.”

Figure 1: Evidence of bacterial pathogens by infection type from the omadacycline surveillance program in 2018.

REFERENCES

